

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)	
)	
Requests To Redefine “Voice Grade)	CC Docket No. 96-45
Access” For Purposes of Federal)	DA 99-2985
Universal Service Support		

COMMENTS
OF THE
NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

The National Telephone Cooperative Association (“NTCA”) hereby submits its comments in response to the Common Carrier Bureau’s Public Notice seeking comment on requests to redefine “voice grade access” for purposes of federal universal service support. NTCA is a national association of approximately 500 local exchange carriers (“LECs”) that provide service primarily in rural areas. All NTCA members are small carriers that are “Rural Telephone Companies” as defined in the Telecommunications Act of 1996. Approximately half of NTCA’s members are organized as cooperatives. NTCA’s members are consistently among the first to upgrade and maintain high quality services in rural areas.

I. INTRODUCTION

NTCA has been a strong supporter for the “evolving” definition of supported universal service enacted in § 254(c) of the 1996 Act and did not regard the initial voice grade service definition as the final word on the national universal service standard for broadband. To protect rural consumers, however, expansion of the bandwidth requirement to achieve higher data transmission rates must coincide with the availability of universal service funding. The

Commission should provide support to an eligible carrier as it upgrades its facilities. The Commission should not unilaterally change the definition of voice grade access and deny support to carriers that have not yet had the opportunity to upgrade. To raise the bandwidth requirement without a sufficient transition period and support for upgrades could result in harm to consumers if carriers are forced to increase rates for basic telephone service. NTCA agrees that new plant should be designed to accommodate higher data transmission speeds. In the interim, grandfather provisions should permit incumbent LECs to continue to receive support based on the existing standard.

II. ACCESS TO BROADBAND SERVICES SHOULD BE A SUPPORTED SERVICE

The petitioning parties propose that the Commission redefine voice grade access to include the provision of a minimum frequency range of between 200 Hz or 300 Hz to 3,400 to 3,500 Hz. It is necessary to recognize that a broader frequency range is not needed for “voice grade” access. The 300 Hz to 3,000 Hz frequency range currently specified in the Commission’s rules is sufficient to ensure appropriate quality of voice transmission over the public switched telephone network and all NTCA members meet the standard. What is really needed to bring broadband services to rural areas is the recognition of access to broadband as a supported service.

In its Fourth Order on Reconsideration, the Commission, on its own motion, reconsidered its specification of bandwidth for voice grade access and concluded that the bandwidth should be, at a minimum, between 300 Hz and 3,000 Hz. In doing so, its decision was consistent with the definition of voice grade bandwidth used by the American National Standards Institute. The Commission also noted that networks utilizing loading coils may experience difficulty operating properly at frequencies exceeding 3,400 Hz. The proposed change in 54.101(b) is not needed to

provide “voice grade” access per se. A more direct approach would be to include broadband as a supported service.

III. IF HIGHER DATA TRANSMISSION RATES IS A GOAL, THE COMMISSION SHOULD EXPAND THE DEFINITION OF UNIVERSAL SERVICE AND PROVIDE SUPPORT FOR CARRIERS TO UPGRADE TO THE NEW DEFINITION

The Universal Service Order mandates that an eligible carrier must already provide the defined universal services. NTCA supports the concept of an expanded definition of universal service. However, the Commission must redefine universal service and the supported services to include increased bandwidth and provide support and a transition period while an ETC is upgrading to the new definition.

NTCA is aware that the current bandwidth specification for voice grade access is not forward looking in view of the phenomenal growth and evolving importance of the Internet. The bandwidth increase was first argued for in late 1997 and early 1998. At that time, the upper limit transmission speed of analog modems was 28.8 Kbps. Today, most home computers are built with modems capable of much faster transmissions. It does not make sense for carriers to build and receive support for new plant that cannot meet even minimal data transmission speeds. However, if the Commission decides to evolve the definition of universal service, it should do so after careful consideration of the future of the industry. The Act provides for an evolving definition of universal service and permits the Commission to periodically define and redefine supported services, taking into account advances in telecommunications and information technologies and services.¹ NTCA encourages changes which recognize the evolution of available services.

¹§254(c)(1).

Policymakers need to look strategically to the future and ensure that universal service support is available to cover emerging technologies so that support can be accessed when market demand requires it.

Further proceedings on the issue must also necessarily consider how eligible carriers will receive “adequate” and “sufficient” support to provide the greater bandwidth needed to accommodate applications requiring high speed access. Significant and expensive upgrades to outside plant facilities and backbone infrastructure will be necessary. The particular characteristics of rural service areas puts many subscribers to rural telephone companies beyond the reach of the facilities necessary to provide increased bandwidth. While rural telephone companies are generally on the cutting edge of technology, most serve some very rural subscribers. RUS recommended that rural local loops be reduced to 18 Kft so that bandwidth can be increased. Some remote subscribers are served with loops of lengths in excess of 20 or 30 miles. A recent survey of NTCA members indicates that 24% of responding companies cannot meet the bandwidth proposal ubiquitously in their service territory.² Several other factors also affect transmission rates, including loop gauge, loop treatments, loaded loops and bridge taps. The longer the loop, the more likely that it contains loop treatments such as loading coils which can further limit transmission rates.³ Those loops cannot meet an increased bandwidth

²NTCA Internet/Broadband Survey conducted in September of 1999.

³For example, an NTCA member recently informed NTCA that the company would have a difficult time meeting the proposed bandwidth. The company purchased GTE exchanges in 1994 that were equipped with H88 loading scheme. The former GTE exchanges cannot meet a new bandwidth requirement without significant upgrades. While rural telephone companies are on the cutting edge of technology, several NTCA members have recently purchased old, outdated exchanges and have begun the slow, deliberate process of upgrading facilities. A sufficient

requirement today. Some members have analog carrier systems, often with single pair cable plants. Analog carrier systems support bandwidth less than what the FCC is proposing. Furthermore, with long loops and multiple repeater devices, remote power units are needed. Circuit noise introduced by these devices limits the data rates to 19.2 kbps despite the bandwidth availability. Significant upgrades and fiber deployment will be necessary. This will include the replacement of analog carrier systems, shortening copper loops, installing digital carrier systems and upgrading exchanges. Therefore, the Commission should ensure that sufficient support coincides with any phased-in upgrade requirement.

IV. CONCLUSION

NTCA members are in the process of upgrading their plant and many have begun providing advanced services. However, the cost of upgrading existing plant makes it impossible for carriers to deploy advanced services to all of their customers at affordable prices. Carriers cannot meet new thresholds for bandwidth or transmission rates in the face of forced transition periods absent adequate recovery. The Commission should not force carriers to upgrade plant to

transition period and sufficient support and cost recovery will be necessary for these carriers to meet an expanded definition of universal service.

provide increased bandwidth unless or until it revisits its basic policy decision on support for transmission links to enable Internet access.

Respectfully submitted,

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ASSOCIATION

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January 19, 2000

CERTIFICATE OF

SERVICE

I, Gail C. Malloy, certify that a copy of the foregoing Comments of the National Telephone Cooperative Association in CC Docket No. 96-45, DA 99-2985 was served on this 19th day of January 2000, by first-class, U.S. Mail, postage prepaid, to the following persons listed below:

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